

**REMARKS**

Claims 75-111 are pending. By this Amendment, claims 38-74 are cancelled and replaced by new claims 75-111. No new matter is added. Applicants appreciate the generous amount of time that Primary Examiner Dennis Ruhl, SPE John Weiss and Director Wynn Coggins provided to Applicants' representative, Mr. Mathis, in a June 6, 2007 personal interview, the substance of which is incorporated into the remarks below.

As will be explained below, the new claims are drafted in response to business reasons, some of which have arisen as a direct result of the constant string of delays caused by the USPTO both in this case and in other patent applications by the same inventors. Applicants expressly reserve the right to pursue any subject matter of any claim cancelled to date in this application or any application that claims priority or substance from this application.

**The Claims Satisfy 35 USC §101**

The Office action rejects claims 38-65 under 35 U.S.C. § 101 stating, *inter alia*, that there was "*no data structure according to IEEE definition in MPEP 2106.01 and relied on by the court, or, software is positively recited by the applicant as their claimed invention.*" This rejection is moot with respect to cancelled claims 38-65 and traversed to the extent that it may apply to any of the new claims.

In particular, Applicants first point out that they have set forth several specific and substantial utilities, and have attributed "real-world" value to claimed subject matter. See, In re Fisher, 421 F.3d 1365, 1371, 76 USPQ2d 1225, 1230 (Fed. Cir. 2005), and MPEP §2107.01. These benefits show that the claimed subject matter is useful to the public as disclosed in its current form. See, Fisher at 421 F.3d at 1371, 76 USPQ2d at 1230, and MPEP §2107.01. To

date, the USPTO has not responded to the specific examples of function imparted by Applicants' AVM database, but merely reiterated a claim of lack of utility based upon no law upon which Applicants are aware.

For example, the requirement for a data structure set forth by the Office Action is not supported by any case law of record. For instance, the data structure definition "relied on" by the Warmerdam court was only "relied on" to the extent that it was used to invalidate a claim (claim 6), whereas claim 5 of Warmerdam (which was found valid) was not directed to a data structure but merely data on a computer-readable medium. In fact, Applicants wish to point out that claim 5 was never challenged under 35 USC §101 either by the Federal Circuit or by the USPTO.

Additionally, there is no case law on record to support the need for positively recited computer software, and indeed the need for various limitations to be "positively recited" is not only not supported by case law, but was removed from the MPEP about a decade ago.

Applicants also wish to point out that any reliance of Diamond V. Diehr with respect to "nonfunctional descriptive matter" is in error as Diamond V. Diehr never touches upon the issue of nonfunctional descriptive matter. To the contrary, Diamond V. Diehr basically stands for the idea that, while a mathematical formula or law of nature (examples of functional subject matter) cannot be the subject of a patent, a claim that recites a mathematical formula (or scientific principle or phenomenon of nature) is patentable given that the claim is not seeking patent protection for that formula in the abstract. That is, *"when a claim containing a mathematical formula implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect (e. g.,*

*transforming or reducing an article to a different state or thing), then the claim satisfies the requirements of 101.”*

Continuing, Applicants wish to point out that any reliance of In re Gulack as authority to reject claims under 35 USC §101 or to negate any patentable weight is in error based upon the explicit direction of the Federal Circuit, which has stated that “[t]he printed matter cases have ***no factual relevance where “the invention as defined by the claims requires that the information be processed not by the mind but by a machine, the computer.”*** {bolded emphasis added} See, In re Lowry, 32 F.3d 1579 at 1584, 32 USPQ2d 1031 at 1034.

Finally, as for those the new claims that do recite computer software (or something equivalent), the above-cited reasons proffered by the last Office Action are thus met. Accordingly, withdrawal of the rejection under 35 USC §101 is respectfully requested.

**Claims 47, 71, 73 and 74 Comply With The Written Description Requirement Under 35 USC §112, First Paragraph**

The Office Action rejects claims 47, 71, 73 and 74 under 35 USC §112, first paragraph, asserting that these claims fail to comply with the written description requirement.

This rejection is moot regarding cancelled claims 47, 71, 73 and 74, and traversed with respect to any new claim incorporating like subject matter.

In particular, Applicants point out that the feature of claim 47 “produce at least one map display that includes at least one respective AVM value associated with at least one property embedded within the map display” is supported by paragraph [0081], and further supported by paragraph [0028].

Continuing, Applicants point out that the feature of claim 71 “software downloaded onto a computer accessed by the consumer via the Internet” is supported by paragraphs [0023]-[0024] which recite that “...[t]he various links 122 and 132 of the present embodiment are a combination of devices and software/firmware configured to couple computer-based systems to the Internet over a wired line,” {bolded emphases added} and that “the provider 130 of the present embodiment can provide a number of web-pages formatted using HTML, XML, Flash or any other viable publishing standard, such that users accessing the web-pages can do so using nothing more than a commercially available web-browser. However, it also should be appreciated that the provider 130 can also use any number of standardized or specially designed software packages as may be necessary or otherwise desired under a given set of particular circumstances.” Applicants note that HTML and Flash are both software standards usable over the Internet and are known to be provided by servers to various user terminals. Thus, Applicants respectfully assert that claim 71 is supported by the written specification.

Similarly, Applicants assert that the language of claims 73 and 74 are supported by paragraphs [0023]-[0024] recited above.

Accordingly, Applicants respectfully request withdrawal of the rejection of claims 47, 71, 73 and 74 under 35 USC §112, first paragraph, and provide due deference to any new claim containing like features.

### **The Claims are Directed to Patentable Subject Matter**

The Office Action rejects claims 38, 66, 67, 68 and 72 under 35 USC §103(a) an article entitled “Appraisers Learning to Live With Black Box Technology” by Lawrence Quinn (hereinafter “Quinn”); rejects claims 39-45 and 49-65 under 35 USC §103(a) over Quinn in

view Metropolitan Regional Information, Inc (hereinafter “MRIS”); rejects claims 46-47 and 69 under 35 USC §103(a) over Quinn, MRIS and Du (United States Pat. No 6,836,270); and rejects claims 71, 73 and 74 under 35 USC §103(a) over Bluebook in view of Quinn, MRIS and TargetTech.

The Office Action further rejects claims 38, 66, 67, 68 and 72 under 35 USC §103(a) over a Yahoo Finance Article “Bluebook International and Basis100 Launch Technology to the U.S. Insurance Industry” (hereinafter “Bluebook”) in view of Quinn; rejects claims 39-45 and 49-65 under 35 USC §103(a) over Bluebook in view of Quinn and MRIS; rejects claims 46-47 and 69 under 35 USC §103(a) over Bluebook in view of Quinn, MRIS and Du; and rejects claims 71, 73 and 74 under 35 USC §103(a) over Bluebook in view of Quinn, MRIS and TargetTech.

These rejections are moot regarding cancelled claims 38-74, and traversed with respect to the extent that they may apply to new claims 75-111.

In particular, Applicants assert that the reviewed art of record does not disclose or suggests one or more databases ... containing records on a plurality of residential properties in a first geographic region, wherein each record of the database includes a first field containing an AVM value of each respective property, as recited in independent claim 75 and similarly recited in the remaining independent claims.

**I. The Applied Art of Record Does Not Teach or Suggest All The Claim Limitations**

As an initial matter, Applicants note that the issue of a database containing a plurality of AVMs has been a subject of at least SIX searches by the USPTO. Applicants note that no art of

record to date has produced a single example of a searchable database of AVM values regardless of whether (as stated by SPE Weiss) AVMs have been known for at least twenty years.

Applicants respectfully assert that the mere existence of AVM technology, even for 20 years, does not satisfy the Patent Office's obligation to identify each and every limitation of the claims. That is, while the recent KSR v. Teleflex case has expanded the reach of allowable motivation, it does not relieve the Patent Office's obligation to identify each and every limitation in the prior art. Additionally, Applicants point out that, while KSR appears to preclude rules that deny factfinders recourse to common sense, KSR also confirms previous Supreme Court decision that preclude conclusory statements and requires an explicit analysis. See, KSR at page 4, par 2.

Applicants also respectfully draw Examiner Ruhl's attention to a December 28, 2006 Amendment where Applicants made explicit statements and claim amendments according to an agreement made with SPE Weiss in order to ASSURE that the claim terms received full patentable weight. To date, however, not a single subsequent Office Action, including the present Office Action, has honored that agreement. Additionally, the Patent Office has failed to provide a single iota of legal authority to support the need for functional language embedded within claim language to assure patentable weight despite: (1) multiple requests to the patent office in the form of Responses to Office Actions, (2) extensive discussions with Internal Specialist Robert Weinhardt, and (3) a FOIA request made on April 19, 2007

While SPE Weiss and Specialist Weinhardt have been quick to cite a non-precedential case, Ex Parte Curry, (Appeal 2005-0509) to stand for some form of direction as to how the Board of Patent Appeals and Interferences (BPAI) might approach the present case, Applicants respectfully point out that the available record in Curry is incomplete, especially given that the

Federal Circuit's subsequent ruling was made under Rule 36. However, as far as Applicants can tell, the obviousness issues in Curry were distinctly different in many respects, including in that the "wellness data" was apparently never identified with any functionality, but could literally be anything a user wanted to enter and later read, and that there was an issue of an intended use of a building .

In contrast, AVMs have distinct functions, due to their inherent nature (as was the case with In re Warmerdam's hierarchy of bubbles<sup>1</sup>), and due to their applications in databases as expressed in the Detailed Description, and due to their expressed functionality in the claims. For example, AVM's in the present claims have distinct functionality, whether by use as a query search term, e.g., to identify properties within a geographic range having a likely market value of a particular range, or by use as a component as a differential value search (DVS) to identify the likely investment potential of a particular property or by use of generating reports of great economic value. Applicants point out that even the end product of a graphic display having AVM or DVS values embedded within are patentable *per se* under the "printed matter cases", such as In re Gulack, as the spatial distribution of wealth against a map can, e.g., allow a prospective investor to view a property's value in comparison to both neighboring properties and comparable properties whereby the prospective investor can better discount the applicability of the "comparable properties", assess the desirability of the neighborhood as a whole, compare entire neighborhoods for concentration of wealth and/or desirability, view the economic potential of a vacant lot in a neighborhood and so on in a manner not as intuitive as by using lists alone.

In addition to the distinct differences between In re Curry and the present case, Applicants point the Examiner's attention to several other non-precedential decisions by the

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<sup>1</sup> See, claim 5 of the attached copy of In re Warmerdam.

BPAI including Ex Parte Brosda (Appeal 95-2429)(the BPAI admonishing an Examiner's position that specific data structures and labels cannot be used to distinguish one database search system from another ... as was essentially the same position wrongly adopted by the Examiner in In re Lowry), Ex Parte Fujinami, (Appeal 96-0809)(stating that the official PTO position requires an examiner to consider the content of the information in a database for purposes of applying rejections Ex Parte Manico (Appeal 96-1455)(rejecting the application of the printed matter cases as required by In re Lowry), and Ex Parte Sasaki (Appeal 96-1455)(stating that patentable weight must be given to a limitation which defines data stored on a disc that defines functional characteristics of the memory).

**A. The Basis100 Article Does Not Disclose or Suggest a Database Containing a Plurality of AVM Values**

Applicants assert that the above rejections are based upon a number of conspicuous and problematic errors including *inter alia* where the term "AVM database" (from the Bluebook reference) is misconstrued to read on "a database of AVM value for residential properties" even as Examiner Vig acknowledges that the "AVM database" is a database used to construct AVM values with his direct comparisons to "*an MLS, county records etc.*" Applicants also note that the language directed to "*information on over 680 cost categories and almost 100,000 component prices,*" has no relevance to a database of AVM values, but is quite clearly directed to the replacement costs for various insured items given that the language of the Bluebook article is directed to a "replacement cost calculator" used for insurance purposes.

Applicants are further distressed given that they have previously addressed this EXACT SAME ISSUE with Examiner Vig both in person and in the December 28, 2007 Amendment to the first (October 12, 2006) Office Action with respect to the Verovalue and Appraisal Today



references cited therein. Applicants again remind the USPTO that the explicit statements and claim amendments made in the December 28, 2007 Amendment were made based on a promise by the USPTO to prevent this EXACT SAME ISSUE from continuing or reoccurring. Given that the rejection in the October 12, 2006 Office Action was dropped on the merits, it is both unfair and a breach of trust that the same issue is now reintroduced into prosecution given that the distinction between a database containing AVM values and a database used to create AVM values is understood by Examiner Vig and clearly expressed in the record. This issue becomes even more problematic in that Applicants have made repeated complaints about the USPTO reneging on its promises on every Response to every Office Action about giving the term “database of AVM values” the patentable weight the SPE Weiss promised.

Given that Director Coggins has repeatedly stated to Applicants’ representative that Group 3600 is bound by its internal policies, and that Applicants have complied with the internal policies regarding patentable weight and functional language (as expressed by both SPE Weiss and Specialist Weinhardt), Applicants respectfully suggest that the USPTO is therefore bound to give full weight to the terms at issue.

**B. In No Instance Does Fairfax County Ever Generate a Single AVM Value for a Single Residential Property**

As discussed in the meeting with Primary Examiner Ruhl, SPE Weiss, Director Coggins and Applicants’ representative, Mr. Mathis, Mr. Mathis asserted that the Quinn article misused terms of art and patently contradicted itself with its misuse. For example, the Quinn quotes a Mr. Larry Ford, former director of real estate finance for Fairfax County, as stating that “*AVMs were used for tax assessment purposes.*” However, three sentences later Mr. Ford also states that

*“... we emphasize that by calling the Fairfax system ‘CAA’ or ‘computer-assisted assessment’ ... it’s clear that **human judgment should always be involved.**” {bolded emphasis added}.*

In response to this conflict of terms, both SPE Weiss and Director Coggins noted that, regardless of whether the Quinn article was right or wrong, it may nonetheless be used as a reference for what it does disclose. Based on the Quinn article, there are two issues that arise. The first issue is whether the ambiguities of the Quinn article can be resolved; and the second is that assuming that Fairfax County does generate AVM values, whether those AVM values are ever stored in a database.

With respect to the first issue, Applicants have provided further documentation regarding Fairfax’s tax assessing system, including three references produced directly from Fairfax County, all of which (like the Quinn article) would have been available to one of ordinary skill in the art at the time of the invention, and all of which work to resolve the ambiguities presented by Quinn article. Applicants assert that an appropriate review of this issue should include consideration of these documents regardless of whether the Quinn article did not pose the apparent ambiguities that it does.

The first reference is from Fairfax County’s “Fund 104 Information Technology” budget for FY 2003, which states under its Tax/Revenue Administration section (IT0006) (page 16):

The project balance will be used to fund the purchase of a **COTS real estate appraisal** and administrative system. Project goals are to eliminate the technology risks and functionality gaps of the existing mainframe systems. ... Additional funding in FY 2004, of approximately \$2.9 million, will be required to complete the ongoing initiative for the accounts receivable system, as well as the assessment system. {bolded emphasis added}

The second reference is from Fairfax County's "Fund 104 Information Technology" budget for FY 2001<sup>2</sup>, which states under its Tax/Revenue Administration section (IT0006) (page 13), which confirms that Fairfax County had invested in appraisal software, not software suited to generate even a single AVM. Accordingly, it is apparent to one of ordinary skill in the art that Fairfax County has a clear history of investing in automated appraisal tools, not automated valuation methodology tools.

Applicants assert that these two references on their own are sufficient to contradict any suggestion that Fairfax County generates a single AVM for its tax assessment purposes. However, when combined with the third reference ("Why Change")<sup>3</sup>, which is taken from the Fairfax County website (archived on "The WaybackMachine" on April 29, 2003), Applicants have provided solid evidence that no AVM value is ever generated during Fairfax County's tax assessment processes.

In particular, Applicants point out that, before an AVM value can be derived for a particular property or group of properties, a computer (not a human) must generate a list of comparable sales for that property or group of properties. Should a human generate a list of comparable sales, then reason and common sense dictates that the end product cannot be an AVM. However, as is stated by the Fairfax County website:

*"Each year staff appraisers examine recent sales that occur within Fairfax County neighborhoods. These sales are studied to determine if they represent fair market value (the price a willing buyer will pay a willing seller on the open market) and to confirm the physical features of the property being sold. ... After adjusting for differences between properties,*

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<sup>2</sup> Applicants note that Fairfax County's "Fund 104 Information Technology" budget for FY 2002 made no reference for any real-estate related computer tools.

<sup>3</sup> See, [http://web.archive.org/web/20040312114551/www.fairfaxcounty.gov/DTA/FAQ\\_Why\\_Change.htm](http://web.archive.org/web/20040312114551/www.fairfaxcounty.gov/DTA/FAQ_Why_Change.htm)

*these sales are used as a guide to determine the proper assessment for all other properties in the neighborhood.”*

Thus, it is clear that before a single estimate of a single residential property is derived, human judgment is directly applied to determine the set of comparable properties. Additionally, it appears that Fairfax County employs its appraisers to perform inspections, i.e., to “confirm the physical features” of properties.

Accordingly, a person of ordinary skill in the art would not only conclude that the ambiguities of the Quinn article should be resolved against the notion that AVMs are used in Fairfax county, but that it is impossible that Fairfax County generates a single AVM based on statements of their internal processes. Thus, the Quinn article, taken in context with other references that speak on the same nucleus of facts, cannot be said to support the existence of a database of AVM values.

#### **C. The Remaining References Do Not Disclose or Suggest a Database of AVM Values**

The remaining references, including MRIS, Du and TargetTech do not teach or suggest a database containing AVM values, nor does the Office Action make such an assertion. Accordingly, MRIS, Du and TargetTech do not provide for the deficiencies of Quinn and Basis100.

#### **D. The Patent Office Can Not Assume That a Database of AVM Values Exists.**

In the absence of any explicit teaching of a database of AVM values or teaching or suggestion to create a database of AVM values, the Patent Office may not just assume the

existence of one for the purposes of examination as to so would completely eviscerate the legal requirement that the Patent Office identify each and every limitation. See, MPEP §2103.01.

During the June 6 personal interview, Director Coggins had asked Applicants representative to prove that there were no databases of AVM values in existence. Respectfully, Applicants assert that, while it is possible in certain circumstances to prove something does not exist for a particular set of circumstances, it is nearly impossible to prove that something doesn't exist somewhere in the United States for some particular application. Further, if this were the test for patentability there would be few, if any, patents ever granted from the USPTO.

However, in response to Director Coggins specific question as to why it would not be common sense to use a database to transfer a plurality of AVMs from a supplier of AVMs to a particular bank, Applicants respectfully reply that, while databases are known to carry large numbers of records, they are a very poor instrument for conveying information from vendors to consumers of data. For example, the United States has literally thousands of banks, savings & loans, market funds and mortgage corporations that make mortgage and home equity loans. Assuming that each of these entities is independent, the likelihood of these entities using a common database structure is highly unlikely, and without compatible database structures there can be no effective transfer.

Further, given the need for security, it is even more unlikely that a bank (or other lending institution) would make details of their databases available to outside entities or grant outsiders database access. Thus, common sense and market forces dictate that practically any other form of conveyance would be preferred.<sup>4</sup> This notion is affirmed by actual practices. For example,

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<sup>4</sup> According to Verovalue (<http://www.verovalue.com/downloads/VeroVALUE.pdf>) each AVM is delivered using a publishing standard known as extensible stylesheet language (XSL), which is used to provide human-readable documents, not computer-readable documents.

according to Verovalue (<http://www.verovalue.com/downloads/VeroVALUE.pdf>) each AVM is delivered using a publishing standard known as eXtensible Stylesheet Language (XSL), which is a publishing standard used to provide human-readable documents generally not suitable for direct computer electronic transfer.

**II. The Art of Record Demonstrates that One of Ordinary Skill in the Art Would Not Choose to Use a Database of Tax Assessments or AVM Estimates for Loans for Investment Purposes**

While Past Office Actions and Examiner statements have suggested that one of ordinary skill in the art might choose to apply tax assessments in a searchable database for investment purposes, or otherwise consolidate AVMs used to secure loans to create a database of AVM values, Applicants respectfully point out that the art of record, common sense and an application of economic theory suggest otherwise.

**A. One of Ordinary Skill in the Art Would Not Choose to Use a Database of Tax Assessments for Investment Purposes.**

County tax records, even if they were based on AVMs, are not suitable replacements for a database of AVMs for a number of reasons including: (1) at best they represent a property's estimated value for a few weeks of the year, (2) historically county assessments have been notoriously inaccurate; and (3) county assessments are subject to distortion for political reasons.

**Issue (1):** Using Fairfax County as an example, tax assessments are made to reflect the value of a property for January 1<sup>st</sup> of each year.<sup>5</sup> Even assuming that this figure is accurate for this date, it will be useless after as little as a few weeks, especially during periods where the relevant markets are quickly changing.

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<sup>5</sup> See, [http://www.fairfaxcounty.gov/dta/FAQ\\_Determine\\_Correct.htm](http://www.fairfaxcounty.gov/dta/FAQ_Determine_Correct.htm)

**Issue (2):** Again using Fairfax County as an example, tax assessments and market price have varied by so much that few, if any, would trust them. For example, according to Fairfax County's own database, a particular condominium (Property ID: 0392 427F0002) sold on February 13, 2002 for \$140,000 while the total assessed value was only \$114,585.<sup>6</sup> Given that condominiums are notorious for their uniformity and proximity, the difference in assessed market value and actual market value, which equates to more than a 22% error would lead one to discount the reliability of county assessments.

**Issue (3):** Again using Fairfax County as an example, for whatever reason Fairfax County's Assessments cannot be said to be reliable indicators of market value. While Fairfax County does allege to make real-estate tax rates based on "*100% of fair market value*"<sup>7</sup>, a careful review of the Fairfax County website explicitly states that after each property in an appraisal group is appraised, the value of each appraisal is adjusted according to an "Assessment-to-Sales Ratio" (ASR), which for Fairfax County is around 92% of the comparable sales for the previous 12 to 18 months. The ASR is derived by dividing the assessed value by the selling price. Accordingly, even in a housing market that is completely flat for years and for a group of identical and closely spaced houses, each property assessed by Fairfax County will at best reflect an average error of 8% below market. While such an approach may give individual owners of real estate an impression that their property is undervalued by the county (and therefore an impression of paying a smaller tax burden), it is nonetheless apparent that this practice, among other issues, is a sufficient reason why people would not rely on county tax assessments for

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<sup>6</sup> The property at issue was selected based on its level of uniformity (being a condominium) and because its sale date was relatively close to January 1. It was the first property found to conform only to those criteria.

<sup>7</sup> See, [http://www.fairfaxcounty.gov/dta/FAQ\\_Determine\\_Correct.htm](http://www.fairfaxcounty.gov/dta/FAQ_Determine_Correct.htm)

marketing purposes. For example, the 8% distortion mentioned above could lead to a \$40,000 loss to a seller trying to sell a \$500,000 property in Fairfax County.

Further, given the lack of universal standards for tax assessment quality throughout the United States, it is extremely unlikely that county tax assessments would ever be used for marketing purposes. Still further, as tax assessments range allegedly from 100% of market value to as little as 6% of market value depending on the individual county or city (as is claimed in the Veroval reference previously cited by Examiner Vig) any reliance on tax assessment databases for investment or marketing purposes would come at even greater risk.

**B. Even Assuming that AVMs Generated for Individual Loans were Consolidated, One of Ordinary Skill in the Art Would Not Choose to Use such a Database for Investment Purposes.**

As stated above, AVMs are generally provided to banks and other lending institutions in order to provide a measure of confidence that a property is not leveraged beyond its worth. To Applicants' knowledge, this information is generally confidential and not made available to the public. Accordingly, publication of such private financial information would likely lead to a lawsuit by any number of interested parties.

Additionally, as these AVMs are provided by a variety of vendors, provided at different times of the year and are relatively few are provided in the course of business compared to the total housing market (typically for home equity loans), they are essentially useless as an investment tool - especially given the rate at which AVM values can grow "stale."

Further, "The Big AVM Lie", which was published by the National Real Estate Appraiser Directory, which serves as a source of real-estate related news and information, describes the use of AVMs for lending as "very risky", "failing miserably" and used only as an



effort to increase the bottom line of mortgage companies at the expense of consumers. See, pars 1-3. The Big AVM Lie goes on to cite a number of particular problems with AVM technology, and makes a condemnation stating “[t]he worse thing about these computer evaluation models (AVMs) is that they are spitting out reports to homeowners who are basing their selling decisions on these. We suggest if you lose money by relying on one of these - that you contact an attorney and file suit[.]” See, pars 4-7.

The article then concludes with a series of “True Life Experiences With AVMs” where reliance on AVM reports had costs, or nearly costs, various consumers tens of thousands of dollars each.

Thus, the art of record shows both great skepticism toward AVMs, and teaches their unsuitability for investment purposes.

### **III. A large Number of Graham Factors Suggest That the Claimed Subject Matter is Nonobvious**

The Supreme Court outlined a number of issues when determining obviousness and non-obviousness in Graham et al. v. John Deere Co. of Kansas City et al., 383 U.S. 1 (1966) (commonly referred to as the "Graham factors") which include: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness. In addition, the Court outlined examples of factors that show "objective evidence of nonobviousness," including: (1) commercial success; (2) long-felt but unsolved needs; and (3) failure of others. Other courts have considered additional factors as well. See; Allen Archery, Inc. v. Browning Mfg. Co., 819 F.2d 1087, 1092, 2 USPQ2d 1490, 1493 (Fed. Cir. 1987) (considering copying and praise as

indicators of nonobviousness); Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679, 7 USPQ2d 1315, 1319 (Fed. Cir. 1988) (considering copying as an indicator of nonobviousness).

**A. Praise by Peers**

As indicated in an earlier Response to an Office Action in this matter, Applicant's website ([www.HomeKeys.net](http://www.HomeKeys.net)) has won praise by the real estate industry for its new technology. While the earlier provided copy of Inman News does not specify the reasons for its acknowledgment of technical innovation, Applicants assert that the technology that separated Homekey from the rest of the real estate market was their particular application of AVM technology, i.e., using a database of AVM values for investment research, as opposed to vending AVM estimates *per se* as is done by Verovalue or simply providing on-line listings..

**B. Copying**

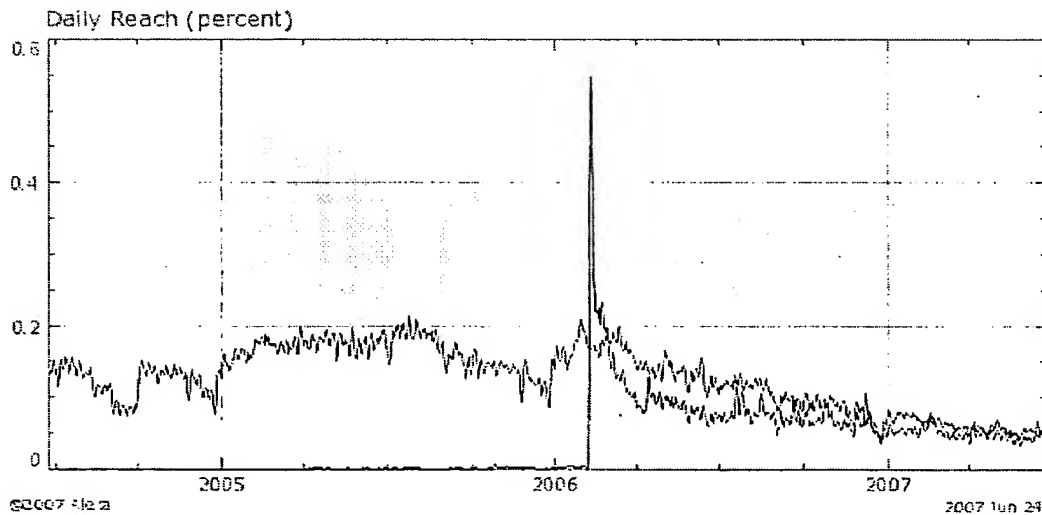
As indicated by the attached Declaration under 37 CFR 1.132, Zillow.com, a company founded by billionaire Rich Barton (who also founded Expedia.com), had as many as 68 of its people frequent Applicants' website over a period of months (May 2005 to December 2005). Shortly thereafter, Zillow initiated its own website ([www.zillow.com](http://www.zillow.com)), which uses the same types of technology, including databases of AVM values and reports that use maps with spatially embedded icons and AVM values. It is worthy of note that Zillow raised over \$57,000,000 in capital to start and develop its website.

Shortly after the launch of Zillow's website, a second website, [www.CyberHomes.com](http://www.CyberHomes.com), was launched, again using the same types of technology, including databases of AVM values and reports that use maps with spatially embedded icons and AVM values. It is worth noting that

Cyberhomes.com is owned by Fidelity National Financial, Inc, a major developer and vendor of AVM technology boasting “*the Industry’s Most Accurate, Detailed AVM Technology*” (<http://www.fidelityinfoservices.com/FNFIS/AboutUs/Brochures/>), yet despite Fidelity National Financial’s expertise in the field of AVM technology, the concept of a Internet website using a database of AVM values did not (apparently) occur to them until after Applicants made their own offering on the Internet.

### C. Commercial Success

As shown below, a report generated by [www.Alexa.com](http://www.Alexa.com) indicates that one of the business models disclosed and claimed in Applicants’ Application, and used as Zillow’s showcase technology, enabled Zillow to become the number one real-estate related website surpassing [www.Realtor.com](http://www.Realtor.com) within weeks, and enable Zillow to maintain a close standing with [www.Realtor.com](http://www.Realtor.com) thereafter up to the present date.



**IV. Even Assuming the Existence of an AVM Database in the Prior Art, the Claims are Still Directed to Patentable Subject Matter Based on Indicia of the Supreme Court's Decision in KSR v. Teleflex**

**A. The Claimed Subject Matter Provides a New Function for AVMs**

The Supreme Court cautioned against granting “*patent for a combination which only unites old elements with no change in their respective functions.*” KSR v. Teleflex, No. 04-1350, page 12, ¶ 1. In contrast to traditional uses for AVMs, such as Banking, the present claims provide for a number of new business functions, including those mentioned above, which common sense would dictate would be private information, i.e., not subject for open review by a plurality of consumers over the Internet.

Further, as compared to a tax assessment database (per the Quinn reference), which may be subject for open review by a plurality of homeowners over the Internet, the underlying function varies substantially from taking money from the wallets of homeowners for public use to allowing (prospective) homeowners to make better informed decisions to buy, sell or simply track their investments over time. Additionally, given that tax assessment databases are subject to political and legal constraints, design incentives and other market forces that might otherwise prompt variations are not applicable. KSR v. Teleflex, No. 04-1350, page 4, ¶ 2.

Still further, as compared to the Basis100 reference, the function changes from insurance to investment.

While Applicants are aware that appraisals are used for loan applications, Applicants are unaware of any database of appraisals used in the manner presently claimed for AVMs.

**B. Economic Forces in the Real Estate Market Favor Few, If ANY, Business Embodiments For E-Commerce**

As was affirmed in KSR v. Teleflex at page 4, ¶ 2, the applicable suggestion test “*not only permits, but requires, consideration of common knowledge and common sense.*” Alza Corp. v. Mylan Labs., Inc., 464 F. 3d 1286, 1291 (2006). A review of “*The State of eCommerce 2002: Beyond the Bubble, Beware the Barriers*” (hereinafter “eCommerce 2002”) confirms what is written in the Background section of the present Application:

*“Unfortunately, the real-estate industry has been highly resistant to the threat of new and potentially disruptive technologies as consumer behavior has been almost completely ignored. While a number of new computer-based tools are under development or have been proposed, their effect has either been inconsequential or specifically designed to preserve the status quo of the real estate industry, rather than directed to transform the industry to the benefit of property owners.”*

The eCommerce 2002 article asserts that there are four areas of commerce that are highly resistant to e-Commerce and innovation as a whole, including real estate, automotive sales, wine sales and contact lens sales. See, e.g., page 4.

The big impediments to on-line realtors include no less than the apparent entirety of the established “brick and mortar” real estate industry, which has systematically placed large burdens that thwart innovation apparently in an effort to maintain their 6% realtor fees, which has been the standard for decades.

The eCommerce 2002 article goes on to say that established realtors have erected barriers with the capacity “*to completely thwart a new enterprise by making the costs of entry so prohibitive that newer, better ways of doing business never even get a chance to succeed.*” See, page 5 and also page 7, Fig. 2. For example, the real estate industry has managed to thwart e-commerce by denying access to MLS databases, filing suits on e-Realtors, proposing policies

that would permit Realtors to stop other Realtors from showing their MLS listings online, and even most importantly penalizing “*Realtors who use the Internet too effectively or efficiently [in that with] a simple written notice and no justification, any Realtor can deny payment of commissions to an eCommerce-enabled Realtor.*” {bolded emphasis added} See, pages 12-13. Thus, according to the available literature, one of ordinary skill in the art, being a rational economic actor, would not likely engage in e-Realty of any sort.

Further, while e-Realty faces a large number of impediments as a whole, AVM vendors using Applicants models face even greater burdens, such as government regulations pushed by the appraisal industry. For example, the Arizona Board of Appraisal has issued two cease-and-desist letters to stop Zillow.com offering its online estimates of home values.<sup>8</sup>

### **Conclusion**

Thus, the independent claims contain patentable subject matter. The dependent claims, in turn, are patentable by virtue of their dependency as well as for the additional features they recite. Accordingly, withdrawal of all rejections is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited. Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is welcomed to contact the undersigned attorney at the below-listed number and address.

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<sup>8</sup> See, e.g., <http://www.azcentral.com/arizonarepublic/business/articles/0414biz-zillow0414.html>

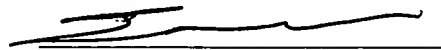
In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

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